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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,229	05/07/2001	Sung Rong Jo	P0239/US/SH	8060

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EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/849,229	JO, SUNG RONG
Examiner	Art Unit	
Melody M. Burch	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 07 May 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-9 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 07 May 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other: _____

DETAILED ACTION

Drawings

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1. the phrase "one of a washer-shaped boss body and a diameter reducing portion in which the diameter is reduced is integrally formed" is indefinite. It is unclear to the Examiner as to which element the boss body or the diameter reducing portion is integrally formed. Examiner has interpreted the claim as being directed to the boss body or the reduced diameter portion being integrally formed with the pin.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by DE-19853012 (using US Patent 6241316 to Jean et al. as an English equivalent).

Re: claim 1 and 9. DE-19853012 shows in figures 13-15 a gas opening/closing pin 119 which opens and closes a gas inlet and outlet 142 formed in a pipe holder 140 which seals one end portion of a cylinder 112 and moves the position of a piston 180 in the cylinder, wherein at least one recess 119a which opens the gas inlet and outlet is formed on the outer peripheral surface of the central portion of the gas opening/closing pin and one of a washer-shaped boss body 119f and a diameter reducing portion in which the diameter is reduced is integrally formed.

Re: claim 6. DE-19853012 discloses in col. 10 line 16 the gas opening/closing pin wherein the outer periphery of the upper end portion of the gas opening/closing pin is chamfered.

6. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5154264 to Poertzgen et al.

Re: claims 1-3 and 9. Poertzgen et al. show in figures 1 and 2 a gas opening/closing pin 21 which opens and closes a gas inlet and outlet 8 formed in a pipe holder 3 which seals one end portion of a cylinder 1 and moves the position of a piston 5 in the cylinder, wherein at least one recess shown in the area of element number 20 which opens the gas inlet and outlet is formed on the outer peripheral surface of the central portion of the gas opening/closing pin and one of a washer-shaped boss body

and a diameter reducing portion shown in figure 2 shown to the right and up from the line associated with element number 22e in which the diameter is reduced is integrally formed.

7. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5096029 to Bauer et al. Bauer shows in figures 1 and 2 a gas opening/closing pin 23,37,49,45 which opens and closes a gas inlet and outlet 55 formed in a pipe holder 12,35,21 which seals one end portion of a cylinder and moves the position of a piston 16 in the cylinder, wherein at least one recess shown in the area of element number 38 which opens the gas inlet and outlet is formed on the outer peripheral surface of the central portion of the gas opening/closing pin and one of a washer-shaped boss body and a diameter reducing portion or top tapered portion of element 37 in which the diameter is reduced is integrally formed.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE-19853012 in view of US Patent 3659573 to Bennett. Bennett teaches in col. 1 lines 17-18 the use of a metering pin made of metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the metering

pin of DE-19853012 to have included a pin being made of metal, as taught by Bennett, in order to provide a means of helping to prevent wear or nicks depending on the structural integrity of the metal material and also depending on cost and manufacturing considerations.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE-19853012 in view of US Patent 4934749 to Folarin. Folarin teaches in col. 3 lines 30-33 the use of a metering pin being made of a non-metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the pin of DE-19853012 to have included a pin made of a non-metal, as taught by Folarin, in order to provide a material more suitable to a molding process for forming an integral pin piece depending on cost and manufacturing requirements.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poertzgen et al. in view of Bennett. Bennett teaches in col. 1 lines 17-18 the use of a metering pin made of metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the metering pin of Poertzgen et al. to have included a pin being made of metal, as taught by Bennett, in order to provide a means of helping to prevent wear or nicks depending on the structural integrity of the metal material and also depending on cost and manufacturing considerations.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poertzgen et al. in view of Folarin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the pin of Poertzgen et al. to

have included a pin made of a non-metal, as taught by Folarin, in order to provide a material more suitable to a molding process for forming an integral pin piece depending on cost and manufacturing requirements.

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. in view of US Patent 3659573 to Bennett. Bennett teaches in col. 1 lines 17-18 the use of a metering pin made of metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the metering pin of Bauer et al. to have included a pin being made of metal, as taught by Bennett, in order to provide a means of helping to prevent wear or nicks depending on the structural integrity of the metal material and also depending on cost and manufacturing considerations.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. in view of Folarin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the pin of Bauer et al. to have included a pin made of a non-metal, as taught by Folarin, in order to provide a material more suitable to a molding process for forming an integral pin piece depending on cost and manufacturing requirements.

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE-19853012 in view of US Patent Re. 18,696 to Messier. Messier teaches in figure 4 the use of a pin having a streamline-shaped recess shown in the area of the line associated with element number 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recess of DE-19853012 to have

included a streamline-shaped, as taught by Messier, in order to provide improved fluid flow of over the outer surfaces of the recess.

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poertzgen et al. in view of US Patent Re. 18,696 to Messier. Messier teaches in figure 4 the use of a pin having a streamline-shaped recess shown in the area of the line associated with element number 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recess of Poertzgen et al. to have included a streamline-shaped, as taught by Messier, in order to provide improved fluid flow of over the outer surfaces of the recess.

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. in view of US Patent Re. 18,696 to Messier. Messier teaches in figure 4 the use of a pin having a streamline-shaped recess shown in the area of the line associated with element number 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recess of Bauer et al. to have included a streamline-shaped, as taught by Messier, in order to provide improved fluid flow of over the outer surfaces of the recess.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6241316 to Jean et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because according to *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993), a later genus (broad) claim is not patentable over an earlier species (narrow) claim. Jean et al. claim an actuating pin fitted in a pipe holder or socket that allows fluid flow in one position and prevents fluid flow in another position and that is integrally formed. Although the instant application is not specific to the particular environment in which the pin is found, Claim 1 of the instant application claims a pin that is integrally formed and that both opens and closes a flow path depending on position due to the presence of the claimed centrally located recess.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 5570873 to Bauer et al., 5273259 to Bauer et al., 5141210 to Bauer et al., 4779851 to Bauer et al., 6234461 to Bohm et al., 5988605 to Weisser et al., 4871149 to Dony et al., 6056251 to Knopp et al., 4728084 to Bauer et al., 4844392 to Bauer et al., 3656593 to Bauer, and JP-246334 show similar metering

pin inventions. US Patents: 3724832 to Ceska and 4787486 to Hrusch et al. show similar recess portions having streamline shapes.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

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May 29, 2002


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5/29/02